Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An acoustic energy device comprising:

a housing having an inner diameter, a first housing end with an inlet orifice, a second housing end with an outlet orifice, a longitudinal axis that extends from said first housing end to said second housing end, and an expanded flow area extending between said inlet orifice and said outlet orifice, wherein a process liquid is flowable through said expanded flow area; and

at least two oscillatory ~~means~~ members assembled within said expanded flow area and spaced a distance apart from one another;

wherein said inlet orifice is narrower in diameter than said inner diameter and a flow of said process liquid through said inlet orifice into said expanded flow area results in turbulent flow; ~~and~~

wherein said turbulent flow of said process liquid causes said oscillatory ~~means~~ members to vibrate, thereby converting a flow energy of said process liquid to an acoustic energy that works on said process liquid;

wherein said vibration of said oscillatory members transmits said acoustic energy and said flow energy back and forth between said oscillatory members, thereby increasing said turbulent flow that is initially generated at said inlet orifice and causing alternating expansion and contraction in said distance between said oscillatory members;

wherein said alternating expansion and contraction in said distance between said oscillatory members increases shear forces and compression forces exerted on said process liquid; and

wherein said shear forces and said compression forces are exerted on a total volume of said process liquid.

Claim 2 (currently amended): The acoustic device of claim 1, ~~said housing having a longitudinal axis that extends from a center point of said first housing end to a center point of said second housing end,~~ wherein said oscillatory ~~means includes~~ members include a plurality of baffles, each baffle of said plurality of baffles having a face with a through-hole and an outer perimeter of said face corresponding substantially with said inner diameter of said housing, and wherein said baffle is assembled within said housing such that said face is aligned transverse to said longitudinal axis of said housing.

Claim 3 (original): The acoustic device of claim 2, wherein said baffle includes a flow-control baffle, wherein said through-hole of said flow-control baffle is a flow-control aperture with a small diameter.

Claim 4 (original): The acoustic device of claim 3, wherein said baffle includes at least two of said flow-control baffle and a spacer, wherein said through-hole of said spacer is a pass-through aperture having a diameter substantially larger than said small diameter of said flow-control aperture, and wherein each said flow-control baffle is separated from another said flow-control baffle by said spacer.

Claim 5 (original): The acoustic device of claim 4, wherein said flow-control baffle includes a single-aperture flow-control baffle and a multiple-aperture flow-control baffle, said single-aperture baffle having a single flow-control aperture and said multiple-aperture baffle having multiple flow-control apertures.

Claim 6 (previously presented): The acoustic device of claim 1, further comprising a housing seal assembly comprising a seal cap, an O-ring, and a nipple insert, said housing seal assembly fitting over said first end of said housing and said nipple insert providing a flow path into said inlet.

Claim 7 (currently amended): The acoustic device of claim 1, wherein said plurality of oscillatory ~~means~~ members includes an oscillatory circuit and a pair of piezoelectric members electrically connected to said oscillatory circuit, said pair of piezoelectric members including a first piezoelectric member and a second piezoelectric member, wherein said flow of said process liquid through said expanded flow area causes said piezoelectric members to vibrate and produce acoustic waves, and wherein said piezoelectric members are arranged such that said acoustic waves emanate from said piezoelectric members in a direction transverse to said longitudinal axis.

Claim 8 (original): The acoustic device of claim 7 further comprising a flow partition disposed between said piezoelectric members and extending in a direction parallel to said longitudinal axis.

Claim 9 (original): The acoustic device of claim 7, wherein at least said first piezoelectric member is electrically connected to said oscillatory circuit.

Claim 10 (original): The acoustic device of claim 7 further comprising a pulse generator, wherein at least said first piezoelectric member is electrically connected to said pulse generator.

Claim 11 (original): The acoustic device of claim 7 further comprising multiple pairs of said piezoelectric members, said pairs arranged within said expanded flow area in series.

Claim 12 (previously presented): The acoustic device of claim 7, wherein said acoustic energy working on said process liquid sanitizes said process liquid.

Claim 13 (previously presented): The acoustic device of claim 7, wherein said acoustic energy working on said process liquid homogenizes said process liquid.

Claim 14 (currently amended): A method of effecting sonochemical processes in a process fluid, said method comprising the steps of:

(a) providing a plurality of oscillatory ~~means~~ members that are spaced a distance apart and are prone to vibration;

(b) creating turbulent flow on a process fluid;

(c) forcing said turbulently flowing process fluid to flow ~~through~~ past said oscillatory members, said turbulently flowing process fluid causing said oscillatory means to vibrate, thereby producing acoustic energy, wherein said acoustic energy is passed back and forth between said oscillatory members, thereby increasing said turbulent flow and causing alternating expansion and contraction in said distance between said

oscillatory members and increasing said shear forces and said compression forces working on said process liquid; and

(d) forcing said process fluid and said acoustic energy through a ~~non-linear~~ flow path~~, thereby~~ that exposes a total volume of said process fluid to said acoustic energy and using said acoustic energy to do work on said process fluid.